

L Number	Hits	Search Text	DB	Time stamp
1	5440	(310/219-249,251-253).CCLS.	USPAT; US-PGPUB	2002/03/07 18:30
2	307	((310/219-249,251-253).CCLS.) and engag\$3 and hole	USPAT; US-PGPUB	2002/03/07 18:45
3	74	(SUGIYAMA near1 KENICHI).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/03/07 18:33
4	14	((SUGIYAMA near1 KENICHI).in.) and commutator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/03/07 18:39
5	1	("5925961").PN.	USPAT; US-PGPUB	2002/03/07 18:39
8	2	("5157299" "5400496").PN.	USPAT	2002/03/07 18:42
9	2	("5157299" "5175463").PN.	USPAT	2002/03/07 18:44
10	127	((310/219-249,251-253).CCLS.) and (engag\$3 same hole)	USPAT; US-PGPUB	2002/03/07 20:57
11	5	("5175463" "5400496" "5629576" "5637944" "5793140").PN.	USPAT	2002/03/07 19:32
12	335	(310/233).CCLS.	USPAT; US-PGPUB	2002/03/07 20:59
13	60	H01R039/08.ipc.	USPAT; US-PGPUB	2002/03/07 20:59
14	395	H01R039/08.ipc.	EPO; JPO; DERWENT; IBM_TDB	2002/03/07 21:01
15	262	(310/237).CCLS.	USPAT; US-PGPUB	2002/03/07 21:00
16	887	H02K013/04.ipc.	EPO; JPO; DERWENT; IBM_TDB	2002/03/07 21:02

CLIPPEDIMAGE= JP410004653A

PAT-NO: JP410004653A

DOCUMENT-IDENTIFIER: JP 10004653 A

TITLE: FLAT-TYPE CARBON COMMUTATOR AND MANUFACTURE
THEREOF

PUBN-DATE: January 6, 1998

INVENTOR-INFORMATION:

NAME

SUGIYAMA, KENICHI

ASSIGNEE-INFORMATION:

NAME

COUNTRY

KK SUGIYAMA SEISAKUSHO

N/A

APPL-NO: JP09051991

APPL-DATE: March 6, 1997

INT-CL (IPC): H02K013/00;H01R039/06

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a flat-type carbon commutator and a manufacture thereof which enables effective utilization of the characteristics of carbon burned beforehand at a high temperature.

SOLUTION: In a flat-type carbon commutator 1, formed by fixing a plurality of metallic segments 5 to a commutator main body 3 constituted of resin, and by fixing carbon integrally to each of these segments 5, an engaging projection provided in the carbon 7 is made to engage with an engaging hole, provided in the segment 5 and is fitted thereto firmly and integrally. A manufacturing method of the flat-type carbon commutator 1 comprising a process, wherein the segment 5, a base metal to be, is integrated with the carbon 7, a process wherein an exposed surface of the carbon 7 is covered with mold resin at the time, when the base metal and the carbon 7 are molded with the mold resin after they have been integrated with each other, a process wherein the base metal is cut off into each segment 5, and the carbon 7 is cut off simultaneously and a

process, wherein the mold resin is removed from the surface of the carbon 7.

COPYRIGHT: (C)1998,JPO

CLIPPEDIMAGE= JP410004653A

PAT-NO: JP410004653A

DOCUMENT-IDENTIFIER: JP 10004653 A

TITLE: FLAT-TYPE CARBON COMMUTATOR AND MANUFACTURE
THEREOF

PUBN-DATE: January 6, 1998

INVENTOR-INFORMATION:

NAME

SUGIYAMA, KENICHI

ASSIGNEE-INFORMATION:

NAME

COUNTRY

KK SUGIYAMA SEISAKUSHO

N/A

APPL-NO: JP09051991

APPL-DATE: March 6, 1997

INT-CL (IPC): H02K013/00;H01R039/06

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a flat-type carbon commutator and a manufacture thereof which enables effective utilization of the characteristics of carbon burned beforehand at a high temperature.

SOLUTION: In a flat-type carbon commutator 1, formed by fixing a plurality of metallic segments 5 to a commutator main body 3 constituted of resin, and by fixing carbon integrally to each of these segments 5, an engaging projection provided in the carbon 7 is made to engage with an engaging hole, provided in the segment 5 and is fitted thereto firmly and integrally. A manufacturing method of the flat-type carbon commutator 1 comprising a process, wherein the segment 5, a base metal to be, is integrated with the carbon 7, a process wherein an exposed surface of the carbon 7 is covered with mold resin at the time, when the base metal and the carbon 7 are molded with the mold resin after they have been integrated with each other, a process wherein the base metal is cut off into each segment 5, and the carbon 7 is cut off simultaneously and a

process, wherein the mold resin is removed from the surface of the carbon 7.

COPYRIGHT: (C)1998,JPO

DERWENT-ACC-NO: 2000-438201
DERWENT-WEEK: 200038
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Flat-surface type carbon commutator for e.g. motor of fuel feed pump,
has lock piece which prevents loosening of connection protrusion of carbon from
connection hole of segment

PATENT-ASSIGNEE: SUGIYAMA SEISAKUSHO KK[SUGIN]

PRIORITY-DATA: 1998JP-0328387 (November 18, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2000156955 A	June 6, 2000	N/A	006	H02K 013/00

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2000156955A	N/A	1998JP-0328387	November 18, 1998

INT-CL (IPC): H02K013/00

ABSTRACTED-PUB-NO: JP2000156955A

BASIC-ABSTRACT: NOVELTY - The connection protrusion (17) of a carbon (17)
is
inserted into a connection hole (5H) of the segment (5) anchored to the
resin-made commutator main body (3). A lock piece (5T) provided in the
periphery of the connection hole permits the insertion of the protrusion into
the hole but prevents loosening of the connection of the protrusion from the
hole.

DETAILED DESCRIPTION - The lock piece is press-contacted to the periphery
of
the connection protrusion. An INDEPENDENT CLAIM is also included for a
flat-surface type carbon commutator manufacturing method.

USE - For e.g. motor of fuel feed pump.

ADVANTAGE - Simplifies integration of carbon and segment, while connected state

of carbon and segment can be maintained reliably. Improves electrical conductivity by connecting connection protrusion and connection hole with electro-conductive adhesive.

DESCRIPTION OF DRAWING(S) - The figures explain the structure of the flat-surface type carbon commutator.

Commutator main body 3

Segment 5

Connection hole 5H

Lock piece 5T

Carbon 17

Connection protrusion 17

CHOSEN-DRAWING: Dwg.1/6

TITLE-TERMS:

FLAT SURFACE TYPE CARBON COMMUTATE MOTOR FUEL FEED PUMP

LOCK PIECE PREVENT

LOOSE CONNECT PROTRUDE CARBON CONNECT HOLE SEGMENT

DERWENT-CLASS: V06 X11

EPI-CODES: V06-M11A; V06-M12; X11-J08A;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2000-328103

CLIPPEDIMAGE= JP409163688A

PAT-NO: JP409163688A

DOCUMENT-IDENTIFIER: JP 09163688 A

TITLE: PLANAR COMMUTATOR

PUBN-DATE: June 20, 1997

INVENTOR-INFORMATION:

NAME

KUROSAWA, TAKUZO

SASAKI, HIDEKI

SUGIYAMA, KENICHI

ASSIGNEE-INFORMATION:

NAME

COUNTRY

KK KAWAMURA SEISAKUSHO

N/A

KK SUGIYAMA SEISAKUSHO

N/A

APPL-NO: JP07318284

APPL-DATE: December 6, 1995

INT-CL (IPC): H02K013/00;H01R039/06

ABSTRACT:

PROBLEM TO BE SOLVED: To enhance the quality characteristics of a commutator by enhancing the service life of a machining tool and the bonding strength between commutator segment and resin.

SOLUTION: A pawl part 19 being cut while partially restricting the circumference is provided at the base of a connecting part 7 projecting from one face of a commutator segment 3 which is then engaged with a resin. This structure enhances the service life of machining tool and provides a high planar commutator segment 1, where the bonding strength is extremely high between the commutator segment 3 and resin, inexpensively using a convenient small press.

COPYRIGHT: (C)1997,JPO